

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for improving compression of data, comprising:
arranging the data on a mixed format physical layout having a plurality of fixed-sized fields, a plurality of variable-sized fields and a plurality of offset slots, the fixed-sized fields being of a first size and the offset slots being of a second size;
dividing the data on ~~[[a]]~~ the mixed format physical layout into the fixed-sized fields and the variable sized fields; and
compressing the data of the variable sized fields and the fixed-sized fields.
2. (Currently Amended) The method ~~defined in~~ of claim 1, further comprising:
storing sizes of the fixed-sized fields in a data dictionary;
storing frequency of the data in the fixed-sized fields and the variable-sized fields in the data dictionary; and
storing information common to all records in the fixed-sized fields and the variable sized fields in the data dictionary.
3. (Currently Amended) The method ~~defined in~~ of claim 1, wherein at least one of the fixed-sized fields ~~comprise of~~ comprises a field values value.
4. (Currently Amended) The method ~~defined in~~ of claim 1, wherein at least one of the fixed-sized fields ~~comprise of~~ comprises a field offsets offset.

5. (Currently Amended) The method ~~defined in~~ of claim 1, wherein at least one of the fixed-sized fields ~~comprise of~~ comprises a pointers pointer into ~~the~~ a data dictionary.

6. (Currently Amended) The method ~~for compressing the data in the fixed-sized fields as defined in~~ of claim 3, further comprising:

storing a value of the at least one of the fixed-sized ~~field~~ fields in an additional variable-sized field;

coding the value of the ~~fix-sized field~~ at least one of the fixed-sized fields as ~~[[of]]~~ a field offset ~~[[by]]~~ pointing ~~the field offset~~ to the additional variable-sized field.

7. (Currently Amended) The method ~~for compressing the data in the variable-sized fields as defined in~~ of claim 3, further comprising:

storing frequently occurring long values of the fields in ~~the~~ a data dictionary;

coding a value of one of the variable-sized ~~field~~ fields as ~~of the~~ a field offset ~~by~~ pointing ~~the field offset into~~ to one of the frequently occurring long values of the fields in the data dictionary, ~~wherein the value of the variable-sized field is a redundant value.~~

8. (Currently Amended) The method ~~for compressing the data in the variable-sized fields as defined in~~ of claim ~~[[5]]~~ 1, further comprising:

coding a value of one of the variable-sized ~~field~~ fields ~~as of the field offset by~~ encoding ~~the~~ a field offset into ~~a record~~ one of the offset slots, ~~wherein the value of the variable-sized field is a non-redundant value.~~

9. (Currently Amended) The method ~~for compressing the data in the variable-sized fields as defined in~~ of claim ~~[[3]]~~ 5, further comprising:

storing frequently occurring long values of the fields in a second data dictionary,
wherein the second data dictionary is larger than the data dictionary; and

coding a value of one of the variable-sized ~~field~~ fields as ~~of the a~~ a field value [[by]]
pointing ~~the field value~~ into the second data dictionary, ~~wherein the field offset is not large~~
~~enough for the second data dictionary.~~

10. (Currently Amended) A method for improving compression of data, comprising:

arranging the data on a mixed format layout having a plurality of fixed-sized fields, a
plurality of variable-sized fields and a plurality of offset slots, the fixed-sized fields being of
a first size and the offset slots being of a second size, wherein the data comprises [[of]] a
group of correlated fields;

dividing the data on [[a]] the mixed format physical layout into the fixed-sized fields
and the variable-sized fields; and

compressing the data of the variable-sized fields and the fixed-sized fields.

11. (Currently Amended) The method ~~defined in~~ of claim 10, further comprising:

storing sizes of the fixed-sized fields in a data dictionary;

storing frequency of the data in the fixed-sized fields and the variable-sized fields in
the data dictionary;

storing information common to all records in the fixed-sized fields and the variable
sized fields in the data dictionary.

12. (Currently Amended) The method ~~defined in~~ of claim 10, wherein at least one of the
~~fix-sized~~ fixed-sized fields ~~comprise of~~ comprises a field values value.

13. The method defined in claim 10, wherein at least one of the fixed-sized fields
~~comprise of~~ comprises a field offsets ~~offset~~.
14. The method defined in claim 10, wherein at least one of the fixed-sized fields
~~comprise of~~ comprises a pointers ~~pointer~~ into the a data dictionary.
15. (Currently Amended) The method ~~for compressing the data as defined in~~ of claim 12,
further comprising:
storing frequently occurring values for the group of correlated fields in ~~[[the]]~~ a data
dictionary; and
coding a frequently occurring value for the group by pointing ~~[[the]]~~ a field offset,
belonging to the group, to the data dictionary.
16. (Currently Amended) The method ~~for compressing the data as defined in~~ of claim
~~[15]]~~ 12, further comprising:
coding an infrequently occurring value for the group, ~~wherein the~~ by pointing a field
offset, belonging to the group, ~~points to the record in the field~~ a field in a record.
17. (Currently Amended) ~~[[The]]~~ A method for retrieving ~~[[a]]~~ compressed data,
comprising:
receiving a request for decompressing ~~a-requested~~ the compressed data;
receiving the compressed data on a mixed format physical layout responsive to the
request, wherein the mixed format physical layout comprises ~~of fixed fields and variable~~
~~fields~~ a plurality of fixed-sized fields, a plurality of variable-sized fields and a plurality of
offset slots, the fixed-sized fields being of a first size and the offset slots being of a second
size;
searching for a value in the ~~fixed~~ fixed-sized fields;

retrieving the value in the ~~fixed~~ fixed-sized fields corresponding to the ~~requested~~ received compressed data.

18. (Currently Amended) The method ~~defined in~~ of claim 17, wherein the retrieving step further comprises:

retrieving a dictionary entry if the value [[of]] in the ~~fixed~~ fixed-sized fields ~~field~~ comprises [[of]] a dictionary pointer;

retrieving a value starting from a field offset if the value of the ~~fixed field~~ fixed-sized fields comprises ~~of the~~ a field offset; and

retrieving a same field from ~~that a~~ a record, if the value of the ~~fixed field~~ fixed-sized fields comprises [[of]] a record offset.

19. (Currently Amended) An apparatus for improving compression of data, comprising:
means for arranging the data on a mixed format physical layout having a plurality of fixed-sized fields, a plurality of variable-sized fields and a plurality of offset slots, the fixed-sized fields being of a first size and the offset slots being of a second size;

means for dividing the data on [[a]] the mixed format physical layout into the fixed-sized fields and the variable sized fields; and

means for compressing the data of the variable sized fields and the fixed-sized fields.

20. (Currently Amended) An apparatus for retrieving [[a]] compressed data, comprising:

means for receiving a request for decompressing ~~a-requested~~ the compressed data;

means for receiving the compressed data on a mixed format physical layout responsive to the request, wherein the mixed format physical layout comprises ~~of fixed-fields and variable-fields~~ a plurality of fixed-sized fields, a plurality of variable-sized fields and a

plurality of offset slots, the fixed-sized fields being of a first size and the offset slots being of a second size;

searching for a value in the fixed fields;

means for retrieving the value in the fixed fields corresponding to the ~~requested~~
received compressed data.

21. (Currently Amended) A compressible computer medium, comprising a plurality of instructions to cause a computer to perform the steps of:

arranging [[the]] data on a mixed format physical layout having a plurality of fixed-sized fields, a plurality of variable-sized fields and a plurality of offset slots, the fixed-sized fields being of a first size and the offset slots being of a second size;

dividing the data on a mixed format physical layout into the fixed-sized fields and the variable sized fields; and

compressing the data of the variable sized fields and the fixed-sized fields.

22. (Currently Amended) The compressible computer medium according to claim 21, wherein the instructions further cause the computer to perform the steps of:

storing sizes of the fixed-sized fields in a data dictionary;

storing frequency of the data in the fixed-sized fields and the variable-sized fields in the data dictionary;

storing information common to all records in the fixed-sized fields and the variable sized fields in the data dictionary.

23. (Currently Amended) The compressible computer medium of claim 21, wherein at least one of the fixed-sized fields ~~comprise of~~ comprises a field values value.

24. (Currently Amended) The compressible computer medium of claim 21, wherein at least one of the fixed-sized fields ~~comprise of~~ comprises a field offsets ~~offset~~.

25. (Currently Amended) The compressible computer medium of claim 22, wherein at least one of the fixed-sized fields ~~comprise of pointers~~ comprises a pointer into the data dictionary.

26. (Currently Amended) The compressible computer medium according to claim 23, wherein the instructions further cause the computer to perform the steps of:

storing a value of the at least one of the fixed-sized field fields in an additional variable-sized field;

coding the value of the at least one of the fixed-sized field fields as ~~[[of]]~~ a field offset ~~[[by]]~~ pointing ~~the field offset~~ to the additional variable-sized field.

27. (Currently Amended) The compressible computer medium according to claim ~~[[23]]~~ 22, wherein the instructions further cause the computer to perform the steps of:

storing frequently occurring long values of the fields in the data dictionary;
coding a value of one of the variable-sized field fields as ~~of the a~~ field offset ~~[[by]]~~ pointing ~~the field offset~~ into the data dictionary, ~~wherein the value of the variable-sized field is a redundant value.~~

28. (Currently Amended) The compressible computer medium according to claim 25, wherein the instructions further cause the computer to perform the steps of:

coding a value of one of the variable-sized field fields ~~as of the field offset~~ by encoding ~~[[the]]~~ a field offset into a record, ~~wherein the value of the variable-sized field is a non-redundant value.~~

29. (Currently Amended) The compressible computer medium according to claim [[23]]

22, wherein the instructions further cause the computer to perform the steps of:

storing frequently occurring long values of the fields in a second data dictionary,
wherein the second data dictionary is larger than the data dictionary;

coding a value of one of the variable-sized ~~field~~ fields as ~~of the~~ a field value [[by]]
pointing ~~the field value~~ into the second data dictionary, ~~wherein the field offset is not large~~
~~enough for the second data dictionary.~~